DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES Office of Structural Materials

Quality Assurance and Source Inspection

Bay Area Branch 690 Walnut Ave.St. 150 Vallejo, CA 94592-1133 (707) 649-5453 (707) 649-5493



Contract #: 04-0120F4

Cty: SF/ALA Rte: 80 PM: 13.2/13.9

File #: 69.28

WELDING INSPECTION REPORT

Resident Engineer: Siegenthaler, Peter **Report No:** WIR-021469 Address: 333 Burma Road **Date Inspected:** 05-Mar-2011

City: Oakland, CA 94607

OSM Arrival Time: 700 **Project Name:** SAS Superstructure **OSM Departure Time:** 1900 **Prime Contractor:** American Bridge/Fluor Enterprises, a JV

Contractor: Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China

CWI Name: CWI Present: Yes Li Yang No **Inspected CWI report:** Yes N/A **Rod Oven in Use:** Yes No No N/A N/A **Electrode to specification:** Yes No Weld Procedures Followed: Yes No N/A N/A N/A **Qualified Welders:** Yes No **Verified Joint Fit-up:** Yes No N/A Yes N/A **Approved Drawings:** Yes No **Approved WPS:** No Yes No N/A **Delayed / Cancelled:**

34-0006 **Bridge No: Component: OBG** Segments

Summary of Items Observed:

On this date Caltrans OSM Quality Assurance (QA) Inspector, Dan Hernandez was present during the times noted above to observe the fit up, welding and related activities associated with the fabrication of the San Francisco Oakland Bay Self Anchored Suspension Bridge at Zhenhua Port Machinery Company (ZPMC) facility on Changxing Island.

OBG Trial Assembly Yard

Segment 12BW/12CW

This QA Inspector observed Shielded Metal Arc Welding (SMAW) in progress of a UT repair on a Complete Joint Penetration (CJP) weld joint. The Weld joint is designated OBW12C-001, Bottom Plate transverse splice. The welder is identified as #046709 and was observed welding in the 1G (flat) position using approved Welding Procedure Specification WPS-345-SMAW-1G (1F)-FCM-repair-1 for CWR2821-R2.

For the above mentioned welding activities ZPMC Quality Control (QC) Inspector is identified as Zhou Peng. The welding variables recorded by QC appeared to comply with the Applicable WPS.

Segment 12BW/12CW

This QA Inspector observed ABF personnel performing Magnetic Particle Testing on the Bottom Plate WT stiffener hold back fillet welds.

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This QA Inspector observed ABF personnel performing Ultrasonic Testing on the Deck Plate transverse splice.

Segment 12BE/12CE

This QA Inspector observed ABF personnel performing Magnetic Particle Testing along the Bottom Plate transverse splice including locations of removed fit up plates.

Segment 12CE

This QA Inspector observed ABF personnel performing Ultrasonic Testing on the Side Plate to Bottom Plate hold back weld, bike path side at west end of segment.

Segment 12AE

This QA Inspector observed fit up of the Suspender Bracket at panel point 110.

Segment 12BW

This QA Inspector observed the removal of the remaining portion of fit up plate by arc gouging from the Side Plate longitudinal splice of the segment and corner assembly, counter weight side.

QA Verification

This QA Inspector performed Ultrasonic Testing (UT) of approximately 10% of the area previously tested and accepted by ABF/ZPMC UT personnel. The following items were tested:

12BW

Longitudinal Diaphragm to Deck Plate Diaphragm

DP3054-001-020

DP3056-001-020

Unless otherwise noted, all work observed on this date appeared to generally comply with applicable contract documents.

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Summary of Conversations:

No relevant conversations.

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Eric Tsang, 150-0042-2372, who represents the Office of Structural Materials for your project.

Inspected By:	Hernandez,Dan	Quality Assurance Inspector
Reviewed By:	Miller,Mark	QA Reviewer